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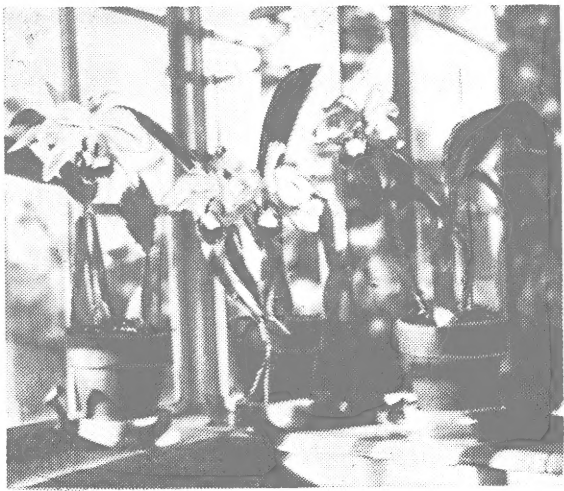
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Grow Real Orchids In Your Home

By
 SAMUEL L. PRESNER

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 Florida





THIRD EDITION



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~~by Samuel L. Presner~~
by

SAMUEL L. PRESNER

6500 S. W. 14th Street

W. Miami, Fla.

THE SECRET IS OUT

For generations the growing of fine Orchids was a closely guarded trade secret. Today, thousands of men and women who have never grown anything more than a radish are growing real Orchids in their homes. They are doing it with less fuss and care than that required by the average house plant.

Cattleya Orchids are air plants. They live chiefly on air, water and filtered sunshine or daylight. When these are given in correct proportions the plant converts them into food and stores it up in the bulbous part of the plant. For this reason Orchids never need to be fed or fertilized like other plants. That is why they have survived thousands of years in the jungles, deserts and mountains under all kinds of adverse conditions.

Orchids are very adaptable. They will thrive beautifully in any home where African Violets will grow, since the amount of light necessary to flower an African Violet is perfect for an Orchid. Yet, Orchids are far less exacting in their needs and requirements than African Violets, roses, gardenias, or a row of cabbages! . . . Orchids are nearly immune to all plant diseases and will often go for years without a single spraying.



NEW YORK, BOSTON, FARGO OR CHICAGO!

Orchids can be grown in any city in the United States. If you live in the North and your home is heated in the winter you can grow Orchids. Generally speaking, Cattleya Orchids do well at temperatures comfortable to the human body, altho they can take lower or higher temperatures when necessary. In the winter I recommend a low of 60 in the home with a high of 75. In the summer, they can easily take the highest temperatures, since by heredity they are all jungle plants.

It takes absolute freezing, 32 degrees, to kill an Orchid plant. I have exposed thousands of plants to 36 degrees without harm to the plants. If the plant is in bloom a temperature lower than 55 degrees will wither the flowers. At 45 degrees the tender buds will wither if the plant is getting ready to bloom. At low temperatures plants will go dormant, and as soon as heat is given they will begin to grow rapidly again. Orchids seem to like a short cool spell and chance to rest and do not appear the worse for it. They catch up quickly with speedier growth after a short rest.

BANISH YOUR DOUBTS!

Most people interested in growing Orchids approach it with too much anxiety and apprehension. An Orchid is actually easier to grow than most house plants. It is simply that they grow under conditions that are not familiar to the average person. Once you learn the conditions that they grow under you will find them easier to grow than most things.

Cattleya Orchids, for example, grow without soil. They are grown in a special fibrous material called Osmunda or Osmundine. This material is the root of a tropical fern found in the Florida Everglades, Australia, Hawaii, and a few other places. When this material was discovered the growing of Orchids on a large scale in a greenhouse or home became a practical reality. Heretofore, the potting medium had been the greatest problem.

STICKS AND STONES!

Most people believe that Orchid plants are parasites because they cling to trees in their natural state of growth. Nothing is further from the truth. An Orchid will cling equally as well to a pane of glass, a piece of tile, a stone, or a lead pipe! If proper proportions of water, sunlight and air are given to the plant it will grow on anything. A parasite is something that destroys whatever it clings too. An Orchid simply holds on for support. It is the history of its very existence.

In its native state the seeds of a Cattleya Orchid are blown by the wind into trees and in the crevices of stones. As soon as the roots form they will cling to whatever object they are in contact with. On this precarious perch begins the life cycle of a Cattleya Orchid plant. If it is lucky enough to survive to an adult age it will begin to flower somewhere between the seventh and tenth year. Once it reaches blooming age it should continue to flower every year. Some of the cattleya hybrids will often flower twice a year. A hybrid is produced by crossing two varieties of orchids, thus producing a new, and often better breed of Orchid.

Grown under good conditions Orchids double their size every two years. They are then transferred into larger pots or they may be split up and made into two plants. I have seen a thirty year old Orchid plant with as many as 150 flowers on it at a single time. They do not die with old age, but become bigger and bigger each year and more productive. Their life span is "forever", so to speak.

I recommend that all plants be changed into larger pots every two years. The Osmunda should also be changed every two years, as that is one of the most important steps to keep them blooming well. Osmunda is an organic material, and after two years in a pot it breaks down and packs to the extent that the root system of the plant cannot breath properly. When this happens the old Osmunda retains water for too long a time and the root system of the plant may rot or suffocate. If the Osmunda is changed every two years after the plant blooms you can keep the plants growing for a hundred years!

WHEN AND HOW TO REPOT PLANTS

When an Orchid plant outgrows its present pot it should be replanted in a pot one inch larger in size. Orchid plants grow best when crowded into small pots. Since the Osmunda must be changed every two years, it is best that they be potted correctly, so by the time they outgrow the pot you will automatically know it is also time to change the Osmunda.

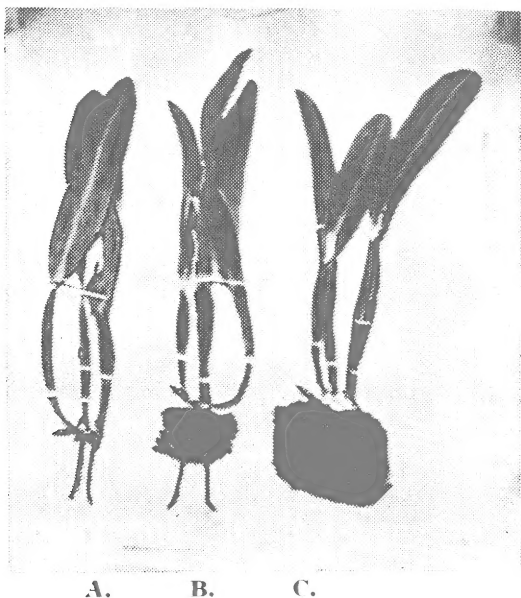
Plants should be repotted right after they bloom. The old Osmunda is torn away from the plant. But you leave a small clump about as big as a half dollar clinging to a few good roots. If roots are too long trim them back with a scissors. Then wrap a collar of dampened Osmunda around the old roots and pack tightly into the pot. Be sure you have about one third of the pot filled with stones to allow for drainage. Large stones are better than small ones. The back part of the plant should touch the rear of the inside pot, since an Orchid grows forward, and you must allow for two years of forward growing.

Some Orchid growers like to have their plants potted a little below the rim of the pot. I prefer to "crest" mine a bit above the rim of the pot. If plants are overwatered they will dry out faster and it will prevent rot. Be careful not to bury the "eyes" which are on the bottom of the bulbs, for if you do, they will either rot out or will not grow. The "eyes" of an Orchid plant must have light to grow, and they cannot grow if buried in the Osmunda.

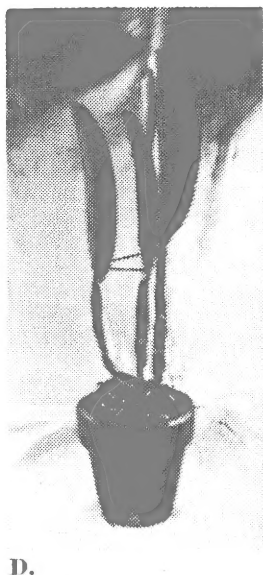
Do not water the plant after it has been potted for at least 60 days. My method is to spray the leaves of the plant daily, once or twice, on sunny days. This method prevents the plant from losing water stored up in its bulbs and forces a NEW root system to start. Strangely enough, when you dry off an Orchid plant, the new root system starts. After the roots start, usually within four weeks, you can begin to increase the daily sprayings lightly. Once you have a good root system you can resume weekly waterings besides a daily spray if you like.

THE PRESNER TECHNIQUE FOR POTTING DIFFICULT ORCHID PLANTS; THOSE WITH LITTLE OR NO ROOT SYSTEM

- A** — Bend a stiff wire into a U shape about 2" in size. This can be made from an old coat hanger. Flare the ends out slightly. Now drop the U shaped wire over the rhizome. See that the wire does not press against any new eye or new lead.
- B** — Cut a small clump of osmunda about 2 inches square. Force the ends of the U shaped wire thru the small clump of osmunda.
- C** — Cut a collar of osmunda about 6 inches long and two inches wide. Wrap this 6" collar of osmunda tightly around the small clump and force tightly into a 4" pot.



The method described above is for a small 3 to 4 bulb plant. For a larger plant you use a longer U pin and a wider collar of osmunda. The pot used should of course be filled with one third crock or stones to allow for drainage. Plant should be tied to a wood or metal stake. Sprinkle leaves daily morning and noon for 2 months on sunny days to induce a new root system. Then you can resume weekly pot watering.

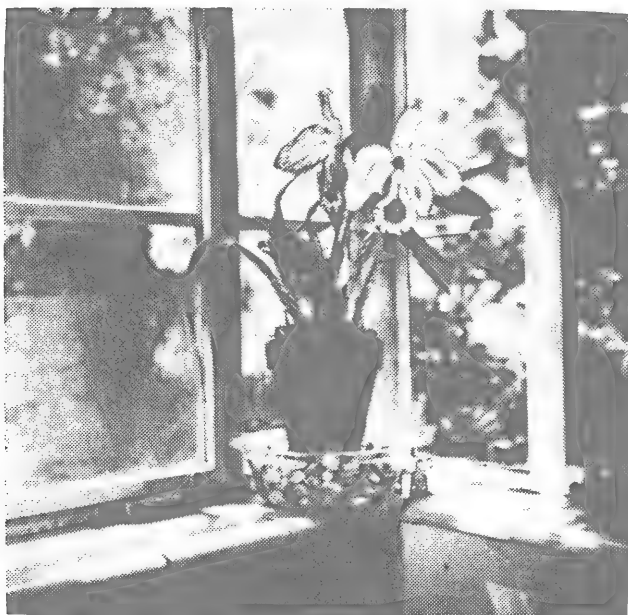


SOME DIFFICULT ORCHID TERMS

MADE EASY

Cattleya	— Cat-lee-uh
Trianae	— Try-ann-ee
Joaquim	— Walk-keem
Terre	— Terry
Mossiae	— Moss-ee-uh or Moss-I-Aye
Tampense	— Tamp-enz or Tamp-en-zee
Epidendrum	— Epi-den-drum
Cochleatum	— Cock-lee-ah-tum
Lead	— Leed
Pseudo bulb	— Sue-doh-bulb
Rhizome	— Rye-zohm
Oncidium	— On-Sid-ee-um
Phalaenopsis	— Fail-ee-n-opsis
Laelia	— Lay-Lee-uh
Osmunda	— Ahs-munda
Terete	— Teh-reet
Velamen	— Vel-lay-men
Epiphyte	— Ehp-ee-fight
Phaius	— Fay-us
Dendrobium	— Dend-robe-ee-um
Vanda	— Van-da
Cymbidium	— Sim-bid-ee-um
Aerides	— Arid-ees
Caerulea	— Sue-rule-ya
Cyrtopodium	— Sir-Toe-Poe-dee-um
Polystachya	— Polly-stay-she-uh
Saccolabium	— Sack-O-lay-bee-um
Lycaste	— Lye-cast
Skinneri	— Skin-ner-rye
Gaskelliana	— Gas-kill-ee-Anna
Mendelii	— Men-dell-eye
Polyrrhiza	— Polly-rye-zuh
Lindenii	— Lin-din-eye
Eulophia	— U-loaf-ee-uh
Bletia	— Bleet-tee-uh
Ionopsis	— I-on-op-sis
Sphagnum	— Spag-numb
Brassavola	— Brass-uh-vohla
Calanthe	— Cal-lan-thee
Hybrid	— Hi-brid
Dowiana	— Dow-ee-anna
Aurea	— Or-ee-uh
Labiata	— Lah-bee-ah-tah

A SIMPLE WAY OF GIVING AN ORCHID PLANT ADDITIONAL HUMIDITY WHEN GROWN IN THE HOME



Take any kind of dish or deep bowl. This can be made of anything; pottery, glass, metal, plastic. It does not matter. Fill the dish to the top with pebbles, bird gravel, chicken grit, pea rock or small stones. Now pour water over this until you have filled the dish or bowl nearly to the top.

As the water evaporates the plant will receive additional humidity from the moisture laden air and also by osmosis. This is most beneficial to orchid plants, especially in homes that are heated in the winter when the air is abnormally dry. This method is also recommended in those parts of the country where the air is normally very dry and arid, as in parts of Texas and Arizona.

Please note that the plant is placed on top of the stones and is actually not in the water. If the plant were placed in water the plant would receive too much moisture and the root system would rot out.



The arrow points to a new growth which always starts at the bottom of a former matured bulb. If a Cattleya orchid plant is 7 years old this **new** growth will produce the flowers when completed. Cattleya orchid plants flower on new growth only. The old flowering bulbs then become food reservoirs feeding the new growth or "eye" as it is called. When the "eye" begins to swell it indicates the plant is in active growth. Within a year or less this "eye" will develop into a bulb and leaf, and produce a sheath and flowers.

At this point careful attention should be paid to correct watering. Once a week take the plant and saturate it by placing it under the faucet or a hose. Besides this, on bright sunny days sprinkle the leaves with a light mist every morning.

Here a few months later we see the "eye" has grown vigorously some 2 inches in size. Growth should be strong, but if insufficient light or water is given this new growth will be weak and spindley.

In some parts of the country ants will be attracted to the tip of this "eye" because of a sap that begins to ooze out at this stage of growth. To control the ants just sprinkle a little 5% Chloradane powder on the os-munda.

If the growth is taking place during the winter months protect the plant from sudden and radical temperature changes. A temperature of not less than 60 degrees is suggested during the night.

About four months has now elapsed since the "eye" first started to grow. Now, the "eye" is no longer called an "eye"—it is now called a "lead"—(pronounced leed). Here we can see that the new growth is beginning to take the shape of the older bulbs and leaves. One can, at this stage, see some semblance of a bulb starting and part of a leaf. Note, that the leaf is still in an immature stage, and partially folded. Later on this leaf will grow and expand and the fold will disappear.

At this stage of growth, called the "cup" stage—it is very important that when sprinkling the leaves no water is permitted to remain in the "cup," or folds of the leaf. If the plant is sprinkled in the morning, as it should be, it will usually dry up by night time. If it does not, it may rot out the new lead. If you want to play safe, just turn the plant upside down after sprinkling and drain the water out of the leaf "cup."

Here we see how the bulb is fully grown, the leaf is well developed, and popping out of the bulb is the sheath from which the buds and flowers will come soon. At this point we curtail water sharply to reduce any new growth of the plant. By watering the plant once weekly or once in ten days we can begin to suspend growth. We do this in order that no new "eyes" will begin to grow. If new "eyes" begin to grow while the plant is in sheath, the sheath may go "blind" and thus produce no flowers that year.

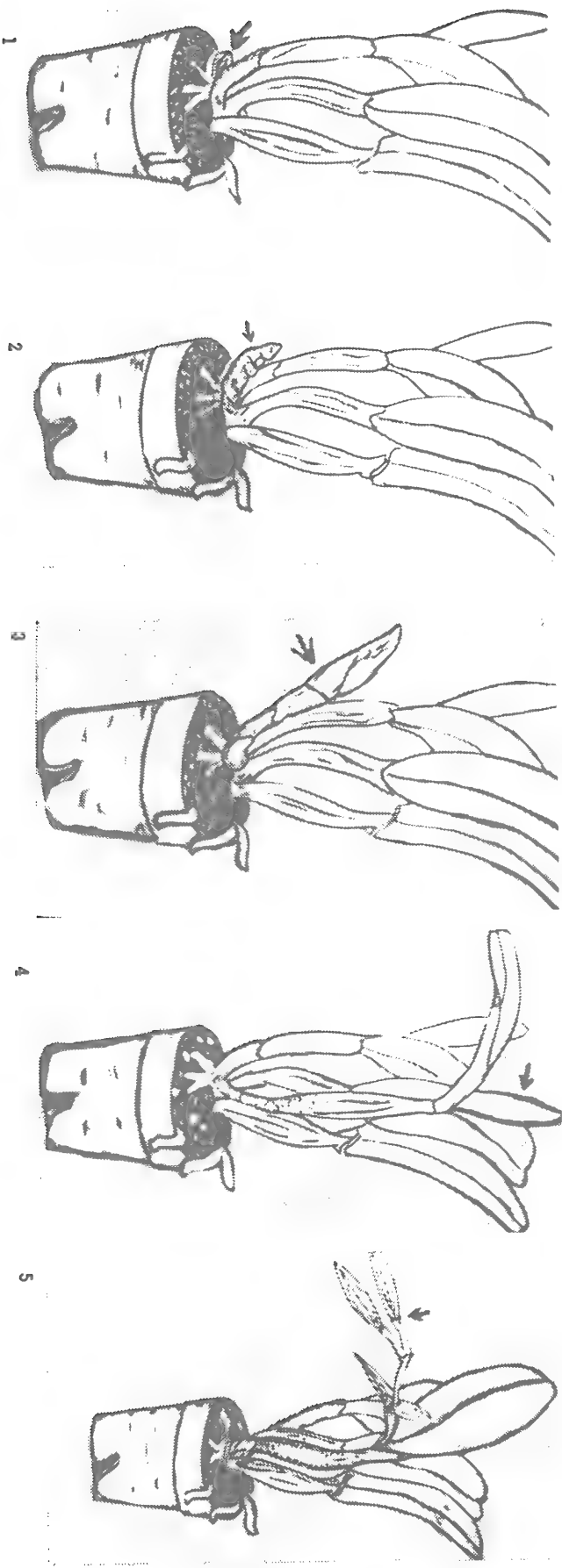
We do this to all Cattleya Orchid plants 60 to 90 days before their flowering period, so that all the vitality of the plant will go into the forming of the buds, and not into new "eyes". If you know for example that your plant normally blooms from December to February and you have a well developed sheath by October or November you simply begin drying off the plant by watering once a week or once in 10 days.

Here we see the buds have popped out of the sheath. This drawing depicts a small plant that produced 2 flowers. Some species produce as many as five huge flowers to a sheath. Naturally the more sheaths you have the more flowers you would get. At this stage the plant should be pot-watered only, once a week. Care should be taken not to wet the flowers as water will cause them to spot.

Once the flowers begin to open it will take 4 to 5 days for them to fully open. They should not be picked until they have been open six or seven days, for it takes that many days for the color and flowers to mature.

If the flower is to be worn, place it in an orchid tube, or wrap it in damp cotton and place it in a covered dish in the lower part of your refrigerator. Flowers should last 2 to 3 weeks, if placed back in the refrigerator each time the wearer is thru wearing the flower. If permitted to remain on the plant flowers will last as much as 5 weeks.

Arrows Show Five Stages of Growth of a Mature Cattleya Orchid Plant



FORMULA FOR SUCCESS!

The two most important things necessary to know for growing Orchids successfully are:

1 — HOW MUCH WATER TO GIVE AN ORCHID PLANT.

2 — HOW MUCH LIGHT TO GIVE AN ORCHID PLANT.

More Orchids are killed by amateurs and experts alike by OVERWATERING than by any other reason ! ! !

It should be realized that in its wild state of growth an Orchid plant clings to a tree with its bare roots. Therefore, no matter how much it rains, the root system will dry out within a few minutes after it stops raining. On the other hand, when you grow the same plant in a home the root system will be wrapped in Osmunda and tightly confined into a clay pot. Obviously, the conditions of growing are not the same.

A potted Orchid plant will retain water for a week or more, depending upon humidity, light, air, size of the pot, condition of the Osmunda, and several other factors. Fresh Osmunda, not over two years old, will stay moist in a pot for about a week. Old Osmunda will retain water for as much as two weeks. If the days are cloudy and humid the plant will pick up extra moisture from the air. Thus, on cloudy days you reduce the daily spray. In hot, dry areas, plants lose water rapidly, hence, they can use daily sprayings on their leaves with benefit, even twice daily.

If plants are hung out in trees or in open patios or porches the wind will dry them out more rapidly than in a home. They too will thus benefit from a daily spraying on their leaves, during bright, sunny days. Where plants are grown in greenhouses, the hotter the day the more you can spray them; the cooler the day, the less you spray them. A good rule to remember is to spray or water on bright, sunny days and to withhold spraying and water on cloudy, rainy, days.

A plant being grown in a heated home needs more humidity, since heating tends to dry out the atmosphere in a room. A daily spraying in the morning is beneficial, and another at noon may also be given. Once a week every plant may be given a good watering by placing it under the faucet.

For those who live in very hot and dry areas of the country, or in excessively heated apartments, plants may be placed in dishes of wet gravel. This gives the plant constant humidity by the evaporation of the water thru the gravel. The method is to take a bowl, either of crockery, plastic, or metal, add about 2 to 3 inches of bird gravel, chicken grit or pebbles. Then add about 1 inch of water. The potted Orchid plant may be placed right on the dampened gravel. The plant is not in water, but the evaporation thru the gravel will greatly assist the plant to get the right humidity under extraordinary conditions of heat and dryness.

LET THERE BE LIGHT

The next most important thing in growing Orchids is Light. This may be in the form of filtered sunlight, as thru the venetian blinds, wooden slats, or the flickering of sunlight thru a small-leaved tree; or it may be diffused light, such as thru a lace curtain, obscured or painted glass. An Orchid plant should never be exposed to the direct rays of the sun either out in the open or thru clear glass. Remember, Cattleya Orchids are by heredity all jungle type of plants, and rarely are they found growing in the full sun, except by an accident of nature.

Orchids must have Light to flower. They need no direct sunlight, just light. The correct amount of light they need is easily determined. An Orchid plant receiving the correct amount of light will have light Nile green leaves. A plant not getting enough light will have dark green leaves. And a plant getting too much light will have yellowing leaves. Sunburn will quickly

cause brown spots or large patches of brown rot on the leaves. If caught in time and cut away the plant will live.

The best location for an Orchid plant is near a window where it will receive maximum light without burning. Any exposure is good as long as the plant gets the maximum light all day long. Usually, wherever you can grow and flower an African Violet you will find Orchids thriving well. They both require nearly the same amount of light for best growth and flowers. Broken down in percentages, one may safely say that Orchids do not need more than 25 to 30% sunlight, but it must be filtered or diffused so that it does not burn the plant.

“CAVEAT EMPTOR”

BEWARE OF BOOBY TRAPS!

If you have never grown an Orchid before you will be easy prey for unscrupulous persons. There are individuals selling wild orchids for as little as a dollar each. These are dried up, broken down bulbs whose flowers will usually be about the size of a ten cent piece. Not knowing one orchid from another you can easily be fooled. Your chance of flowering these is about 1 chance in 100! So when you get ready to buy a plant be certain of the dealer from whom you buy; consult your Garden Club, if possible, or friends who might be growing Orchids now.

The price of a good, vigorous, well established plant such as I sell, varies from \$8 to \$15 a plant. Smaller ones of blooming age at around \$5.00. My prices are based on quality and appearance of the plant, rarity, season of the year, size of the flower expected, color, texture, and several other factors. Rare and unusual colors brings up the price. Thus, White, very dark shades, Yellow, Bronze, and other rare colors will be usually double in price. That is a quick run down on my prices. Other dealers may charge you more. Inspect a lesser price with suspicion for it is impossible to produce fine plants much lower in price than

the plants I sell and still maintain high standards of quality.

I grow all cattleya plants in flower pots. They are all well established, vigorous plants of blooming size. I handle no young seedlings. All my plants are adult plants and will flower on their present growth or their new growth. In short, you can expect flowers from my plants anywhere from 30 days to 1 year, depending on what time of year the plant blooms and what time of year you are buying it. Most Cattleya Orchid plants produce flowers once a year. A few of the better types produce two sets of flowers a year. The amount of flowers a plant produces depends on the size and age of the plant. The older and larger the plant the more flowers it produces.

Amateurs cannot, except in rare exceptions, grow Orchids from seed. It is a highly technical procedure and certainly cannot be recommended for a beginner.

RECOMMENDATION FOR BEGINNERS

Do not attempt to absorb too much information at one time by purchasing various books on Orchids. Further reading is certain to confuse you since each grower or writer has his own pet theories of how to grow Orchids. Mine is based on growing thousands of plants. The next book you read may be based on growing a few dozen plants by an amateur grower who means well but whose experience is very limited. The information I have given you in this booklet is more than enough to get anyone started in growing Orchids successfully. The next step is to get some plants and get started. You will learn more by growing one plant than reading a dozen books.

HOW TO GO AWAY ON A CARE-FREE VACATION AND NOT WORRY ABOUT YOUR CATTLEYA ORCHID PLANTS



Simply place your plants in your kitchen basin or bathtub as shown. Fill tub or basin with 5 inches of water. Invert a red clay pot in the water and place your Orchid plant on top of this.

By the principle of osmosis and evaporation your plant will receive sufficient humidity and moisture to thrive for several months if necessary. Just be sure you leave your window open a few inches so that plants may receive fresh air.

QUESTIONS ASKED MOST FREQUENTLY BY AMATEURS— WITH ANSWERS YOU CAN UNDERSTAND

Question: What genus of Orchid makes the best house plant?

Answer : The Cattleya Orchids.

Question: I live near the ocean. Will salt air hurt my plants?

Answer : No. Actually the damp air will help them.

Question: My home is heated to 72 by day and permitted to drop to 60 at night. Will this be too cold for orchids?

Answer : No. This would be an ideal temperature for most orchids.

Question: I am a business woman and cannot spare much time for plants. Can I still grow a few orchid plants?

Answer : Cattleya Orchids require minimum of care; one pot watering a week and an occasional spray on the leaves when actively in growth. Time required: about 5 minutes a week.

Question: What kind of fertilizer should I use on my Orchid plant?

Answer : None. Cattleya orchids are air plants. Given the proper amount of water and light they extract from the air, and possibly from fresh esmunda, all the food they need.

Question: My Vanda orchid has grown twice as large in the past year but has not flowered. What have I done wrong?

Answer : You did not give the plant enough light. Vandas, unlike most orchids, need full sun striking the plant all day long, and a sprinkle all over the plant at least once daily. They like lots of water and cannot be overwatered.

Question: I expect to go away for several weeks this summer on vacation and will have no one to take care of my Cattleya Orchids. Have you any suggestions for their care?

Answer : Fill your bathtub or basin with 5 inches of water. Invert an empty red clay flower pot in the water. Now place your orchid plant on this pot. Your plant will absorb enough moisture to keep it thriving while you are away. Just be sure to leave the window open a few inches so the plant will receive some fresh air.

Question: What is a good insect spray for Orchid plants?

Answer : I use a 10% D.D.T. oil spray made especially for Orchids. One ounce mixed with a gallon of water makes an excellent spray. Use on cloudy days and when plant is cool.

Question: What is the best room to keep an orchid plant?

Answer : Any room with plenty of windows and light is satisfactory, altho south would be the best.

Question: What shall I clean the leaves of my Orchid plant with?

Answer : Bottled milk does the best job.

- Question:** How often should I divide my Cattleya orchid plant?
- Answer :** You can usually divide a plant when it has 6 or 8 bulbs or more. It is not necessary, however, unless you want to make more plants. If a plant is producing a satisfactory amount of lowers there is no advantage in dividing a plant.
- Question:** I live in Wisconsin and it gets bitterly cold here in the winter. Can I grow orchids in this climate?
- Answer :** You can if you have a heated home.
- Question:** Do I need a greenhouse to grow Orchids?
- Answer :** No. You need only a heated home and windows for light.
- Question:** Can I give my orchid plants artificial electric light and thus stimulate them to better growth and more flowers?
- Answer :** No. Experiments have proven that you reduce flower production by giving Cattleyas too much light by artificial methods. 25% to 35% light is the maximum.
- Question:** My home is oil heated. Will this affect the plant?
- Answer :** No. However, any heated home will benefit by increasing humidity. You can do this by simply placing the plants in dishes of wet pebbles or bird grit.
- Question:** In my city they use chemicals to purify our drinking water. Will this hurt the plant in any way?
- Answer :** No. Any water fit for human consumption is fit for an orchid plant.
- Question:** Can I hang my plants out in trees in the summer time?
- Answer :** Yes. They will benefit by the moist, night air.
- Question:** My Orchid plant is a beautiful shade of rich dark green. It looks healthy but has not flowered this spring. Why hasn't it?
- Answer :** Your plant has not received enough light. The dark green color is the proof. Orchid leaves receiving the correct amount of light will have light nile green leaves. Place your plant closer to the window to receive more light.
- Question:** In repotting a Cattleya Orchid plant what must I do with all those roots clinging to the pot? How can I prevent injury to the roots?
- Answer :** Do not worry about the roots. Cut them all short, to about one inch in size. Orchid plants, contrary to many books, do best on a NEW root system if properly handled in repotting. After you repot the plant, do not pot water the plant for 60 days, but sprinkle the leaves faithfully every morning on sunny days, and again at noon. Within 30 days you will see a wonderful new root system developing.
- Question:** Will my orchid plant die after it blooms?
- Answer :** Certainly not. It will get bigger and bigger each year and produce more flowers all the time.
- Question:** Where do I cut the flowers from a Cattleya orchid plant?
- Answer :** It really does not matter, but take as much stem as possible and it will keep the flower in better shape.
- Question:** How often do Cattleya Orchids bloom?
- Answer :** Most of them flower once a year. A few may flower twice a year or whenever they complete a new growth, which may be every eight months.

Question: My sheaths turn mouldy and dry up. What causes this?

Answer : Usually this is caused by too much overhead watering late in the day. To avoid this spray your plants in the early morning hours on bright, sunny days. Also cut the dry sheaths across the top so that the buds can come thru.

Question: What causes roots to turn brown and rot off?

Answer : This is usually caused by overwatering the plant.

Question: New growth or lead is flabby, soft, dark green and will not grow erect. What is the cause?

Answer : This may be caused by using some kind of fertilizer on the plant, or it can be caused by the plant not receiving enough light. The solution is to either stop fertilizing or give the plant more light.

Question: The leaves of my Cattleya Orchid plant are shriveling up. What causes this?

Answer : It may be caused by destruction of the entire root system due to too much watering. Or, it may be due to lack of water. Pull the osmunda apart and if you still have a good white root system it means you are underwatering the plant, or if the root system is rotten, that is the cause. In either event, the treatment for saving the plant is the same. Repot in fresh osmunda and sprinkle the leaves of the entire plant morning and noon each day until it improves. Also inspect plant carefully for scale; a white cottony disease, and if found treat with DDT 10% in solution.

Question: How will I know when to change the osmunda?

Answer : Fresh osmunda is very stringey. Old osmunda crumples in your hand like soil or peat moss. The plant will rock in old osmunda and may easily be pulled out of old osmunda.

Question: Which way is better for growing Cattleyas Orchids flower pots or wooden rafts?

Answer : Flower pots are best, as you can judge and control watering of the plant more accurately; they are easier to handle in flower pots, and require much less care.

Question: Can I use the water right as it comes from my faucet to water my orchid plants?

Answer : Yes, in the summer time. In winter let the water warm up to room temperature.

Question: After the flower dies on my orchid plant will I be able to get a seed pod?

Answer : No. Orchids grown in the home or greenhouse must be hand pollinated to grow seed.

Question: How many flowers will my orchid plant have?

Answer : This depends on the size of the plant. A single lead Cattleyas will average 2 flowers per lead. On Vandas like Joaquim they will average 5 to 11 flowers per spike. I have had Tampenses that made over a thousand flowers to a plant. Orchids of different types and sizes vary in the amount of flowers a plant will carry. Usually the larger the plant the more flowers you may expect.

HOW TO GROW VANDA ORCHIDS

Vanda orchids are very easy to grow. The terete types such as Joaquim should be grown in the full sun. Plants require a daily sprinkle over the entire plant. The more water and sun you are able to give them the more flowers they will make and the more growth. You cannot overwater a Vanda!

They can be planted in old osmunda, sphagnum moss, peat moss, or any organic material. A well grown Vanda will double its size every year.

Propagation is simple. Just cut a piece off the top about 12 inches in size. Plant firmly in old osmunda, peat moss, etc. Give half shade for about 30 days, then when plant has made a few new roots place in the full sun. Entire plant should be sprinkled at least 2 to 3 times daily the first 30 days to induce new roots.

Vanda Joaquim is a free bloomer often blooming several times a year. Flowers on a spike will average 5 to 13, and will remain in bloom 2 to 3 months. Vanda Terre is a good Easter-to-June bloomer, with larger flowers. There are several fragrant types from India in various colors, from lavender to white. Rarest color is the blue.

Most Vandas produce flowers of the small variety, but make up what they lack in size by their prolificacy. Some of the Indian types run to red shades, rust, brown, etc. Many of these are fragrant. If you have a spot where the sun will strike the plant all day be sure to try a few Vandas. Vandas require no fertilizer.



VANDA JOAQUIM

TAMPENSE SPRAY ORCHIDS



If you like a spray type of orchid you will like the *Epidendrum Tampense* pictured here. These grow wild in the Jungles, and when in bloom can be located by their sweet fragrance. The plants are very hardy and of easy culture. The flowers will last six weeks in bloom or more. They are very easy to grow and do best fastened to a slab of wood or the limb of a tree, altho they may be grown as a potted plant. The color of the flower is usually yellowish-green with bright rose and white centers. Due to insect pollenizing the flowers vary a great deal from plant to plant.

The culture of Tampenses is simple: If mounted on slabs of wood or tree limbs they can be sprinkled once or twice a week. If potted in *Osmunda*, water them as you would a *Cattleya* Orchid. During the early spring and summer they can be given lots more water to induce growth. In the winter keep them on the dry side by watering them once a week. In climates where the temperature does not fall to freezing they are fastened to trees and allowed to shift for themselves. They are very hardy and can take more neglect than any orchid I know of.

Specimens are sometimes available on tree limbs from \$5 to \$20. Others not on tree limbs available usually at \$5 to \$20 a plant. A twenty dollar plant will usually produce 1,000 flowers during its blooming season. Such plants often have 200 bulbs to a plant. You will sometimes see Tampenses sold for a dollar or two but these will be tiny divisions cut from large plants. I never do this as it weakens the plant.

CONCENTRATE YOUR SHOT

When I am asked what kinds of Orchids are most suitable for amateur growers as house plants, I always say Cattleya Orchids. There are at least 10,000 different kinds available to bloom at different times of the year, and the color variety is endless. With rare exception they require the same culture. Since they are by far the most beautiful of all Orchids and also the largest flowering kind (some flowers are 10 inches in diameter), I know the beginner is certain to be pleased when he sees his first flowers.

Where one can give a Vanda space in his home or greenhouse, I also recommend them. However, they require different growing conditions. They must have a sunny spot or full light from morning to sundown. If you have such a location you will also find these easy to grow.

Vandas produce small flowers, usually from one to two inches in size. The very rare ones produce larger flowers. Some Vandas, like Miss Joaquim, are free bloomers. They will often bloom two and three times a year. As the plant gets older it becomes more prolific and large specimens are seldom out of bloom. Vanda Teres is an exquisite dark gold and rose color blooming only between Easter and July. These are two of the inexpensive varieties. The Vanda Joaquim is the flower given away by the millions each year as gifts by stores running special sales or on other occasions.



AN INVITATION

You are cordially invited to visit me and look over my Orchid collection whenever you are in this area. The address is 6500 S. W. 14th Street (on 65th Avenue), W. Miami, Florida.

SUGGESTED COLLECTIONS OF BEST GROW- ING TYPES OF ORCHID PLANTS SUIT- ABLE FOR HOME GROWING

Note: All Plants are adult plants, pot grown, and will flower on their present or new growth. All are Cattleya unless otherwise stated.

SELECTION "A" — My selection or yours of one mature plant, from \$8.50 to \$15.00. Where possible I will endeavor to give you a plant to bloom during the season you want it to bloom, but if not available, final selection will be from a plant as close to that season that you wish.

COLLECTION "B" — Three fine plants all of a different color and to bloom at a different time of the year, \$25.00. State seasons desired and I will endeavor to comply.

COLLECTION "C" — Four small Cattleyas, all to bloom at a different time, and all of a different color. These are fully mature plants or divisions of my fine stock. \$25.00.

COLLECTION "D" — Three rare plants to include 1 White, 1 Yellow and one Dark Burgundy or Red, to bloom at different times. Only \$40.00. An excellent value.

COLLECTION "E" — 1 Vanda Joaquim, 1 Vanda Terre, 1 Xmas blooming Cattleya Orchid. \$20.00.

***"SURPRISE COLLECTION"** — This consists of Cattleya Hybrids, Laelia Cattleyas and Brasso Cattleyas of most all colors. Tags have been lost on these, so you may find some to be rare white, yellow, alba, pink, green, bronze, red, or burgundy. All were originally very fine but over a period of years tags were lost. Collection of Six fine, vigorous plants \$50.00. A single plant may be worth the price of the entire collection!

*** Note:** On all other collections I select plants so that you will have no duplication of plants or colors, and also to give you the widest blooming seasons, the chief idea being to give you flowers throughout the year in those seasons that you prefer.

SAMUEL L. PRESNER

BOX 4550 - CORAL GABLES, FLA.



* *Polyrrhiza Lindenii*

* *Polyrrhiza Lindenii* is a rare orchid that was developed by mother nature, no doubt, with a twinkle in her eye. Looking like a white frog, it never makes any leaves. Its root system clings to logs or branches of trees. Flower is pure white and often is 6 to 8 inches from tip to tail. The species is nearly extinct and occasionally I have a few for collectors.